

ELECTRICAL PROVISIONS

by by

NSTALLATION: Install raceways parallel or perpendicular to building members. Close conduit runs during construction. Apply waterproofing compound to joints in rigid conduit runs. Install fittings and supports of same material and finish as conduit. Support raceways with brackets, hangers, or other approved devices. Is the perforated strap or wire hangers. Install pull boxes or points for maximum 200' run and 3 yuarter bends in wiring conduit runs and 100' of run and 2 quarter bends in signal and communications conduit runs. Install long sweep elbows in signal and communications conduit runs. Except for erminations in threaded hubs, lock conduit in place with proper fittings and install bushing. Bond and ground all systems in accordance with N.E.C. As required or as shown on plans, install boxes and devices on surface or flush with building finish, with units rigidly fastened in place properly aligned. Pull wire only strer areas are cleaned and pull with proper lubricants and continuous between boxes without splice. All conductor runs shall be continuous with no splices. After installation, check all electrical work for grounds and shorts and correct as required. Color code conductors as directed by Owner. All work in classified areas shall comply with N.F.P.A. & NEC sections respectively.

XES, SUPPORTS AND SPECIALTIES: Install of galvanized malleable steel alloy. Install boxes underground, as quired by the National Electric Code with threaded cast hubs and gasketed covers attached with screws. essed boxes will no be allowed. Boxes shall be equal to Steel City, Appleton or Raco. Seal—offs shall be just to Crouse—Hinds complete with packing (fiber filler kit/sealing cement.)

NELBOARD & BREAKERS: tie back into existing breakers in existing panels as required.

CEWAYS: All raceways shall be rigid type with electric or hot dip galvanized or rust resistant finish. Use no iminum conduit. Conceal all raceways where possible. Install liquid—tight "Greenfield" with grounding conductors idoor, or wet locations. Install rigid conduit with threaded fittings as required by the National Electrical Code. conduit in any hazardous/classified area shall be rigid & have seal offs installed per NEC.

DESCRIPTION OF WORK: Furnish and install all labor, materials, and equipment shown on the drawings and specified herein, including all items and specifications required, whether specified or not, for complete working systems. In general, the Electrical Work consists of the following: vDARY WIRE AND CABLE: Except as noted, install minimum #12 AWG 600—volt copper Type THHN/THWN or vted on the drawings. Install solid conductors for #10 size and smaller. #8 and larger shall be stranded or although not necessarily shown, provide a complete "green"ground throughout bonded and grounded as per with connections as detailed including wiring and equ main 3 phase 4 wire 208Y/120 volts.

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RELATED DOCUMENTS: Drawings and General Provisions of Contract, including General Requirement Sections, apply to work of this section.

INTEE AND WARRANTY: Provide all labor, equipment, material, etc. required to complete installation led herein and/or shown or scheduled on the drawings. Each piece of equipment shall meet mance specifications after one (1) year actual operation. The Contractor shall replace or make good efect due to faulty workmanship or material which shall develop within one (1) year from date of lance. This guaranty shall cover both materials and labor. For the first year after final acceptance, ontractor shall provide, at no cost to the Owner, any required maintenance and service necessary to the proper operation of the system. Date of acceptance shall be that date on which the contract een satisfactorily completed in accord with contract documents and verified by the Engineer. If a or partial system, or equipment, is put into use for benefit of any party, other than the Contractor, with prior written permission of the Owner, this agreed date shall become the "date of acceptance".

EXISTING SERVICES: No service shall be interrupted without permission of the Owner. When encountered in work, protect existing active: sewer, water, gas, electric, other utility services are not indicated, request Engineer for instructions. When encountered in work, whether or not indicated, cap or plug or otherwise discontinue existing inactive: sewer, water, gas, electric, other utility services, structures which interfere with work execution. Notify the Engineer of action token. If removal is required, request instructions.

DRAWINGS: Drawings are diagrammatic. The Contractor shall install the work in such manner that the equipment, conduit, etc. will fit in space provided.

FEES: The Contractor shall pay for fees and inspections as may be required for all electrical work.

COMPLETION ITEMS: Provide all labor, equipment, materials, etc. required for all electrical work.

EQUIPMENT OPERATION: This Division is responsible for: proper rotation, observing that lubricating has been properly performed, motors operate within nameplate limits, overload heater elements properly sized, and reporting observed discrepancies to the Engineer. Operate all motors for at least one hour. At the end of this hour's at not operate within proper limits, this Division is responsible for notifying the General Contractor as to the deficiencies and for leaving the piece of equipment furnished by other sections, if lubricating is not correct, or if motors do not operate within proper limits, this Division is responsible for notifying the General Contractor as to the deficiencies and for leaving and patching. All excavation a locked "OFF" condition.

CUTTING AND PATCHING: All cutting and patching shall be by these contractors. Coordinate with owner for match the existing finish grades of the asphalt areas disturbed under this contract. Patching shall mean and all disturbed concrete and asphalt areas disturbed under this contract.

1. IBC: International Building Code.
2. NFPA: National Fire Protection Association.
3. FM: Association of Factory Mutual Fire Insurance Company.
4. ASTM: American Society of Testing Materials.
5. UL: Underwriters Laboratories.
6. NEX: National Electrical Manufacturer's Assoc.
7. NEMA: National Electrical Manufacturer's Assoc.
8. ANSI: American National Standard Institute.
9. ADA: American Society of Testing Materials.
10. NESC: National Electrical Safety Code.
11. OSHA: Occupational Electrical Safety Code.
12. UL: Underwriters Laboratories.
13. NESC: National Electrical Safety Code.
14. OSHA: Occupational Electrical Safety Code.
15. UL: Underwriters Laboratories.
16. NESC: National Electrical Safety Code.
17. NESC: National Electrical Safety Code.
18. NESC: National Electrical Safety Code.
19. NESC: National Electrical Safety Code.
19. NESC: National Electrical Safety Code.
19. NESC: National Electrical Safety Code.
10. NESC: National Electrical Safety Code.
11. OSHA: Occupational Safety and Health Act.
11. Western the contract documents take precedence.
12. Nesc: National Electrical Safety Code.
13. Nesc: National Electrical Safety Code.
14. Nesc: National Electrical Safety Code.
15. Nesc: National Electrical Safety Code.
16. NESC: National Electrical Safety Code.
17. NESC: National Electrical Safety Code.
18. Nesc: National Electrical Safety Code.
19. ADA: American National Electrical Safety Code.
10. NESC: National Electrical Safety Code.
11. OSHA: Occupational Safety Code.
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11. OSHA: Occupational Safety Code.
11. OSHA: Occupational Electrical Safety Code.
12. Nesc: National Electrical Safety Code.
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19. Nesc: National Electrical Safety Code.
19. Nesc: National Electrical Safety Code.
19. Nesc: National Electric

AND STANDARDS: The intent is that the complete installation shall comply with applicable laws dinances, utility company regulations, and applicable requirements of the latest editions of the following:

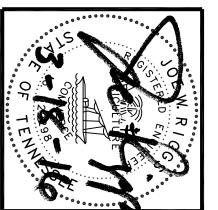
IAL CONDITIONS: By the act of submitting a bid, this Contractor agrees that all of the "Contract ments" in each of the Divisions of the complete specifications have been reviewed and studied and all rements and coordination resulting therefrom are included in his proposal. The Contractor further owledges that he has visited the site to become familiar with existing conditions. In the Electrical Division, word "Contractor" means the Electrical Contractor. The word "provide" means furnish, install and connect. of scale drawings having 1/4" or smaller scale. Because of small scale, it is not possible to indicate all ts, fittings and accessories; provide such as are required for complete installation. The right is reserved ove any element as much as ten (10) feet at no increase in cost provided the Contractor is notified before in question is started.

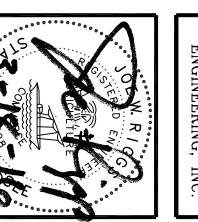


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